Archaeological Investigations at Northton, Harris, Western Isles, 2011

Data Structure Report

ARCHAEOLOGICAL INVESTIGATIONS AT NORTHTON, HARRIS, WESTERN ISLES, 2011

DATA STRUCTURE REPORT

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SUMMARY

In September 2011, a detailed environmental sampling programme of the Mesolithic buried land surface at Northton was implemented. Previous fieldwork at the site in 2001 had revealed the first radiocarbon-dated Mesolithic deposits in the Western Isles eroding at the base of machair beneath the later Neolithic and Beaker settlement (Gregory et al 2005). A subsequent small-scale excavation undertaken in 2010 revealed a concentration of Mesolithic artefacts and ecofacts mixed within an old ground surface (Bishop et al 2010, 2011).

In order to assess the spatial extent of the Mesolithic archaeology within the exposed old ground surface, a series of samples were taken at 3m intervals around the coastal edge. At each sampling location, the old ground surface was surveyed, photographed, drawn and bulk samples were taken for artefacts and ecofacts. In addition, a relict peat section approximately 100 m. from the 2010 excavations was taken from pollen analysis and a column sample approximately 7.5m from the 2010 excavations was taken for land snail analysis to provide a palaeoenvironmental context for the archaeological remains.

The excavated sections through the old ground surface contained varying concentrations of environmental remains and artefactual material, but no archaeological features were detected. On the North-East side of the headland, the main anthropogenic Mesolithic horizon excavated in 2010 was present in all sampling locations (up to approximately 25m from the 2010 excavation). The absence of this layer in sections over 18 metres to the North-West of the area excavated in 2010 suggests that this deposit is spatially restricted to an area approximately 45-50m around the coast. However, a possible earlier Mesolithic horizon containing sparse anthropogenic material was present in all sampling locations, suggesting that the Mesolithic landscape is preserved over a considerable area of the peninsula (at least 40 x 40m).

1. INTRODUCTION

1.1 Research Context

Until recent years, archaeological evidence for Mesolithic human occupation on the Western Isles of Scotland has remained elusive. Though palynologists have argued for Mesolithic human impact on the environment in the region since the 1980s (Edwards 1996, 2000, 2004), this evidence has remained contentious because of a lack of indisputable palynological indicators of Mesolithic human impact (Tipping 2004) and the absence of archaeological evidence for human settlement. The discovery of the first Mesolithic archaeological site in the Western Isles in 2001 at Northton, Toe Head peninsula, Harris was therefore of considerable international research significance and represented the most north-westerly Mesolithic site in Europe (Figure 1; NGR: NF 975 912; Gregory et al 2005; Simpson et al 2006). However, rather than indicating a rarity of Mesolithic archaeology in the area, the delay in the discovery of Mesolithic sites in the region is probably a reflection of the difficulty of locating Mesolithic sites under the thick peat and machair deposits that characterise the topography of these islands, together with the destructive effects of relative sea-level rise since the early to mid Holocene (Edwards 1996). Indeed, subsequent post-excavation analysis and radiocarbon dating in 2009 of samples taken from a coastal erosion survey undertaken in 1997 and detailed coastal survey during fieldwork in the region in 2011 has identified three additional previously unknown Mesolithic sites at Aird Calanais, East Loch Roag, Lewis (NGR: 206 335; Flitcroft and Heald 1997; O'Brien et al 2009), Tràigh na Beirigh, Cnip, Lewis (NGR: NB 1002 3628; Blake et al 2012; Church et al 2012b) and at Temple Bay (Bàgh an Teampaill), Toe Head Peninsula, Northton, Harris (NGR: NF 9734 9132; Blake et al 2012 ; Church et al 2012a). The sampling and post-excavation analysis of the material recovered from these sites will add significantly to knowledge about the nature of Mesolithic human settlement in the region and provides an important opportunity to study the nature of human-environment interaction in a challenging environment (Bishop et al 2011).

1.2 Summary of Previous Research at Northton

A major rescue excavation project conducted at Northton in the 1960s by Derek Simpson, uncovered a series of Neolithic and Beaker midden deposits associated with stone-built structures (Simpson 1976). During this excavation, the basal horizon, which lay directly above the boulder clay was interpreted as an earlier Neolithic occupation phase due to the presence of a sherd of Neolithic pottery in the deposit. During a subsequent survey of the settlement in 2001 by a team directed by Eileen Murphy and Derek Simpson, two eroding sections containing comparable deposits beneath the machair were identified and sampled (Gregory et al 2005; Murphy et al 2001a, b; Simpson et al 2006). As with the basal deposit recorded in the 1960s, the 2001 sub-machair horizons were initially regarded as Neolithic layers, because of the stratigraphic similarity to the basal deposit identified in the 1960s excavations and the presence of a single barley grain and possible single sheep bone in the 2001 samples (ibid). However, subsequent radiocarbon dating and analysis of charred hazelnut shell from these deposits provided evidence for 2 Mesolithic phases of occupation, with samples producing dates ranging between c. 7060-6650 cal BC for phase 1 and c. 6510-6090 cal BC for phase 2 respectively. Despite the presence of the post-Mesolithic material in the horizons, the remainder of the artefactual and

environmental material recovered from the site was consistent with a Mesolithic interpretation. Therefore, it is probable that the Neolithic material became incorporated within the Mesolithic deposits as a result of post-depositional processes (Simpson et al 2006:19).

Following the initial small-scale sampling and dating of the site at Northton in 2001, it became clear that the site was being rapidly destroyed by coastal erosion. Consequently, because of the research significance of the site and the imminent threat of coastal erosion, a small-scale excavation was undertaken by a team from Durham University in 2010 in order to further establish the nature of the deposits and to undertake detailed environmental sampling (Bishop et al 2010, 2011). A small trench (1 x 5 m) was laid out along the eroding edge of the exposed Mesolithic horizons, and a 100% sample was taken of all archaeological deposits. Excavation and sampling of the site revealed a concentration of Mesolithic lithics, charcoal, carbonised plant macrofossils and marine and terrestrial animal bones mixed within an old ground surface. Since no archaeological features were detected in the excavated area, the site has preliminarily been interpreted as an old land surface that incorporates a scatter of lithic material and a palimpsest of disturbed and bioturbated hearth deposits containing fuel remnants and food waste.

The excavation in 2010 was successful in providing a large sample of environmental and artefactual material from the Mesolithic horizons in order to characterise the nature of the deposits. However, a subsequent field season was necessary in 2011 for two main reasons. Firstly, since only one trench was excavated, the 2010 excavation provided no indication of the spatial extent of the Mesolithic horizons around the coast. A borehole survey conducted as part of fieldwork in 2001 (figure 7) provided evidence that the Mesolithic horizon continued at least 40m into the interior of the headland to the North of the 2010 excavation trench (hereafter termed 'trench 1'; Murphy et al 2001a), but the spatial extent around the headland remained uncertain. Thus, it was deemed necessary to conduct further sampling to establish the spatial extent of the Mesolithic horizons. Secondly, during fieldwork in 2010, a relict peat section was noted approximately 100m from the Mesolithic deposits at Northton, but there was insufficient time to sample the section. This peat deposit provided an excellent opportunity to study the palaeoenvironmental sequence from close proximity to a known Mesolithic archaeological site in detail and to assess the possibility of Mesolithic human impact on the environment. It was also considered necessary to take additional samples for land snail analysis in order to provide further environmental contextual information for the site.

1.3 Research Aims

The aims of the 2011 field season at Northton were to:

1. to assess the spatial extent of the Mesolithic horizons and the anthropogenic activity by undertaking detailed sampling and analysis of the archaeobotanical, zooarchaeological and artefactual remains recovered from the eroding deposits.
2. to take samples for pollen and land snail analysis to provide a palaeoenvironmental context for the archaeological remains.

The following report details the results of this fieldwork, together with a revised stratigraphy for trench 1, based on new radiocarbon dates obtained after the 2010 excavation and reporting had been completed.

2. METHODS

2.1 Radiocarbon Dating

Following the excavations at Northton in 2010, eight samples from trench 1 were sent to SUERC for AMS radiocarbon dating to resolve the chronology of the latest occupation phase excavated in trench 1 (phase 3) (Bishop et al 2011). Four fragments of charred hazelnut shell retrieved from context 14 (equivalent to context 10 in the 2001 excavations) were chosen for radiocarbon dating, with four additional samples of limpet shell selected to establish the marine reservoir effect for this geographical region in the early Holocene (table 1). This analysis formed part of an on-going research project, led by Philippa Ascough of SUERC, investigating the variability in the Marine Reservoir Effect, across the North Atlantic (cf. Ascough et al 2009).

2.2 Bulk Sampling

In order to assess the spatial extent of the Mesolithic archaeology within the exposed old ground surfaces, where possible, samples were taken at 3m intervals from trench 1 in a North-West (figure 2) and North-East transect (figure 3) around the coastal edge. However, at several of the 3m sampling intervals, the overlying machair had collapsed to completely cover the Mesolithic horizons and it was not possible to expose the old ground surfaces because the sand layers were extremely deep and unstable. Consequently, where samples could not be taken at precise 3m intervals, the nearest exposed pre-machair horizons were chosen for sampling. Sections which had no archaeological horizons were also noted, but were not drawn or sampled. During this fieldwork, two additional exposed sections (sections 16 and 17) >50m from trench 1 were observed to contain shell-rich horizons and, as they were considered to be of possible Mesolithic date, they were also sampled. Bulk samples were also taken from the land snail sampling section (section 15), which was located between two of the interval samples (see section 2.3).

At each sampling location, approximately 0.5m of the old ground surface was exposed in section, cleaned, photographed with a digital camera, surveyed using a geo-referenced Topcon Positioning System and the sections drawn at a scale of 1:10 prior to excavation. All sampled deposits were excavated by hand using standard archaeological excavation methods and a bulk sample was taken from the main archaeological horizon at each sampling location for environmental analysis and artefact retrieval. Each section was excavated approximately 20cm into the eroding deposits, creating bulk samples of c. 2.5 litres from each sampling site. A single context recording system was used and finds were located in three dimensions relative to the datum line and using the geo-referenced Topcon Positioning System. Following Ballin (2009:90), unworked, as well as worked quartz was retained for specialist analysis. After excavation, each section was reinstated with sand and beach pebbles. This reinstatement strategy will not protect the Mesolithic archaeology in the face of the long-term and aggressive coastal erosion at the site but it will stabilise the sections in the short-term.

2.3 Pollen and Land Snail Sampling

Two eroding sections were chosen for palaeoenvironmental analysis to provide an environmental context for the archaeological remains. Prior to sampling, each section was cleaned, drawn, photographed with a digital camera and the location recorded using the geo-referenced Topcon Positioning System. A relict peat section located approximately 100 m. from trench 1 was sampled for pollen analysis using a 0.5 m. column sample and was carefully labelled and wrapped in cling film for transportation (figures 4 and 5). The column sample for land snail analysis was taken from a section of the pre-machair deposits with deep stratigraphy (section 15), which was approximately 7.5m from trench 1. Samples of c. 0.5-1 litres were taken at 5cm intervals through the pre- and post-machair contexts using a cleaned leaf-trowel and collected in individual bags (figure 14).

2.4 Post-Excavation Methodology

The soil from the bulk samples was either processed using a flotation tank on site or floated by hand in a bucket (Kenward et al 1980; Pearsall 2000) in the environmental processing laboratories at the Department of Archaeology, Durham University. The residues were caught in a 1.0 mm mesh and the flot in 1.0 mm and 0.3 mm sieves. The material floated on site was air-dried before transportation back to the environmental laboratories at Durham University for post-excavation analysis and samples processed in the laboratory were oven-dried at a low temperature. Due to the wetness of the deposits during the excavation and the difficulty in floating wet bulk samples, a secondary reflot of the residues will be undertaken using a 1.0 mm sieve to retrieve un-floated plant material. Following re-flotation, the residues will be sorted by eye to 4.0 mm and the 1.0 mm and 2.0 mm fractions will be sorted using a low-powered binocular microscope to ensure the successful recovery of all artefacts and ecofacts.

3. RESULTS

3.1 Radiocarbon Dating and Revised Stratigraphy for Trench 1

The radiocarbon dates obtained from context 14 in trench 1 are presented in table 1, together with the radiocarbon dates obtained from the 2001 excavation (Gregory et al 2005). Rather than producing a Neolithic or terminal Mesolithic date as previously suspected (Bishop et al 2011), the new radiocarbon dates from the hazelnut shell from context 14 are contemporary with the dates taken from context 5 in the 2001 excavations (equivalent to context 9 in the 2010 contexts), the latest Mesolithic phase on the site. However, unfortunately, the resulting marine shell dates from context 14 were significantly younger than the hazelnut shell dates. Visual examination of the stratigraphy of the site showed that there was no gradual transition from contexts 14 and 3 into the phase 2 wind-blown sand layers. This suggests that the original *in situ* machair layers have been removed by erosion. Therefore, when the later sand layers deflated onto the stable surface of contexts 14 and 3, eroded material, such as the Neolithic marine shells were redeposited, creating a palimpsest of Mesolithic and Neolithic ecofacts in contexts 14 and 3 (cf. Gilbertson et al 1996:96, 1999:453). In contrast, with the exception of the eroded *possible* sheep phalanx recovered in 2001,

context 9 is not known to contain any intrusive material and it appears that contexts 14 and 3 protected context 9 from major deflation and redeposition episodes.

Consequently, six stratigraphic phases were identified in the 2010 excavation trench. A summary of the phasing is provided below and figure 6 summarises the revised stratigraphy for the site. Phase 1 represents the most recent windblown sand layers encountered at the site. During the excavation, it became clear that there was a stratigraphic discontinuity in the sequence and that the later prehistoric and historic layers had been removed by a recent erosion event. This may have occurred during a huge storm in 2006, which, according to members of the local crofting community, resulted in severe erosion of the coast in this area. Thus, the Phase 1 layers probably consist of re-deposited material from the exposed section above the site. Phase 2 is interpreted as a mixed interface horizon. It consists of a series of disturbed, truncated or redeposited windblown sand layers, which contain varying quantities of later intrusive material and prehistoric artefactual material. Phase 3 (contexts 14 and 3) is interpreted as an upper Mesolithic horizon containing redeposited Neolithic material from the destroyed later prehistoric horizons. Phases 4 and 5 contain the only *in situ* early prehistoric layers. Phase 4 (context 9) is the middle Mesolithic horizon, and it is thought to equate to context 5 in the 2001 excavations, and is dated to c.6600-6100 cal BC (table 1; figures 6). Phase 5 represents the earliest Mesolithic layers (contexts 16 and 17) on the site. These contexts are equivalent to context 7 in the 2001 excavations, which was radiocarbon dated to c. 7060-6650 cal BC (table 1). Finally, Phase 6 is the natural glacial till.

3.2 2011 Fieldwork results

Figure 8 presents the locations of all the sampled sections, and the section drawings and Harris matrices for all sampling sites are shown in figures 9 to 18.

3.2.1 Interval Sampling

Descriptions of the composition of the main Mesolithic horizons sampled in the 2011 sections (contexts 9, 16 and 17) are shown in appendix 1 and are described in further detail in Bishop et al (2011). In all sections, the Mesolithic horizons directly overlay the glacial till (context 8) and were sealed by layers of natural wind blown sand and turf (context 22). Contexts 14 and 3, which were identified in trench 1, were absent from all the excavated sections and with the exception of context 18 in section 15, no other archaeological horizons were identified in any of the sections. As with the Mesolithic horizons identified in trench 1, no archaeological features were detected in any of the excavated deposits. During the excavation, only a single lithic artefact was recovered from any of the sampling sites. However, several unstratified lithics were discovered from material eroded onto the beach below the Mesolithic land surfaces and these were retained for specialist analysis.

The old ground surfaces (contexts 9, 16 and 17) initially identified in trench 1 (figure 8) varied in thickness and extent in the excavated sections and contained differing concentrations of anthropogenic material. On the North-East side of the headland, both the main, later anthropogenic Mesolithic horizon (context 9) and the earlier Mesolithic horizon (contexts 16/17) were present in all the sampling locations, up to approximately 25m from trench 1. In contrast, in the North-West transect, context 9 was only present in sections 7-10 and appeared to recede in section 10,

where it was reduced to only a narrow band of material. Considering this, together with the fact that context 9 was absent from sections 11-14, it seems likely that context 9 does not extend far beyond section 10 in this transect (approximately 18m from trench 1). Though there were no anthropogenic horizons present in section 6, only a thin layer of machair was present and it seems likely that the archaeological deposits may have been removed by coastal erosion.

Similarly context 9 was absent from section 15, but an additional deposit was identified beneath the machair (context 18). Context 18 consisted of a very dark-brown sandy silt containing rare (<1%) small angular/sub-angular stones (1-2cm and 5-10cm) and a single lithic flake (SF107). Though the colour of the soil was darker than contexts 16 and 17, the composition was very similar to context 17 and as it was located in the same stratigraphic position (immediately above the glacial till), it is interpreted as a probable lower Mesolithic horizon equivalent to contexts 16/17 (figure 10). Considering the presence of context 9 in sections 7-10, which were further along the headland, it is possible that context 9 may also have been destroyed by coastal erosion in this location.

3.2.2 Sections 16 and 17

Immediately underlying the natural machair and turf layers in section 16, were two shell-rich horizons (contexts 20 and 21). Contexts 20 and 21 both contained frequent shell (c. 25%) and rare (<1%) small (2-10cm) sub-angular stones scattered throughout a loose dark-brown sandy silt matrix. Transecting the top of context 20 was a discrete band of shells, which extended for approximately 41cm from the Eastern section edge. Though identical in composition, contexts 20 and 21 were initially interpreted as separate contexts because a patch of sand appeared to separate them towards the top of the section. However, during excavation it became clear that the contexts merged together beneath the sand patch and consequently contexts 20 and 21 are considered to be the same context (figures 11, 19 and 20). Towards the base of these horizons, the shell inclusions became less frequent and both contexts gradually graded into the glacial till below.

A further shell-rich deposit was present in section 17 (context 19: see figures 12, 21 and 22). Context 19 was a dark-brown/black, extremely organic sandy silt with frequent small (<0.2cm) sub-rounded/sub-angular stones (c. 20%) and shell inclusions scattered throughout the deposit (c.10%). A fragment of preserved wood was also recovered during the excavation of context 19 and was retained for analysis (SF106). Context 19 was directly overlain by two natural layers of dark-brown peat (contexts 28 and 26) and several distinct layers of wind-blown sand (contexts 23, 24, 25 and 27) and turf (context 1).

Prior to sampling it was hypothesised that contexts 20/21 and 19 were Mesolithic land surfaces containing anthropogenic shell deposits because both layers directly overlay the glacial till and were sealed by >20cm of peat and machair. This idea was called into question by the recovery of a sheep tooth from both sections during sample processing. However, considering the extent of the coastal erosion in the area and the presence of post-Mesolithic material in some of the other early-mid Holocene horizons excavated during previous fieldwork at the site, it is possible that

the sheep teeth were intrusive into the possible Mesolithic layers. Radiocarbon dating is necessary to resolve the chronology of these deposits.

4. PRELIMINARY INTERPRETATION

The absence of the upper Mesolithic horizon (context 9) in sections over 18 metres to the North-West of trench 1 suggests that the later Mesolithic deposits at this site are spatially restricted to an area approximately 45-50m around the coast. Additional evidence for the large spatial extent of this horizon comes from the borehole survey conducted as part of fieldwork in 2001, which provided evidence that this horizon continued at least 40m into the interior of the headland to the North of trench 1 (figures 7 and 8).

The lower Mesolithic horizon appears to cover an even greater spatial area (> 40 x 40m). With the exception of section 6, which contained no archaeological deposits, the lower Mesolithic horizon was present in all of the sampling locations on the North-West and North-East transects (sections 1-15), as well as in all of the successful cores in the bore hole survey (cores B, F, H and J).

This suggests that these buried early-mid Holocene land surfaces are preserved over a considerable area of the Toe Head peninsula and most probably extend beyond the sampled area. Within this landscape, the artefactual and ecofactual concentrations in and around Northton Trench 1 and at Temple Bay (Church et al 2012a) appear to represent discrete locations of activity occurring during different periods of the Mesolithic occupation of the region. Considering the extensive area of the early-mid Holocene land surface preserved on this peninsula, it is likely that other Mesolithic sites exist in the vicinity, buried beneath the deep machair deposits.

5. ACKNOWLEDGEMENTS

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FIGURES

Figure 1: Site location (from Gregory et al 2005).

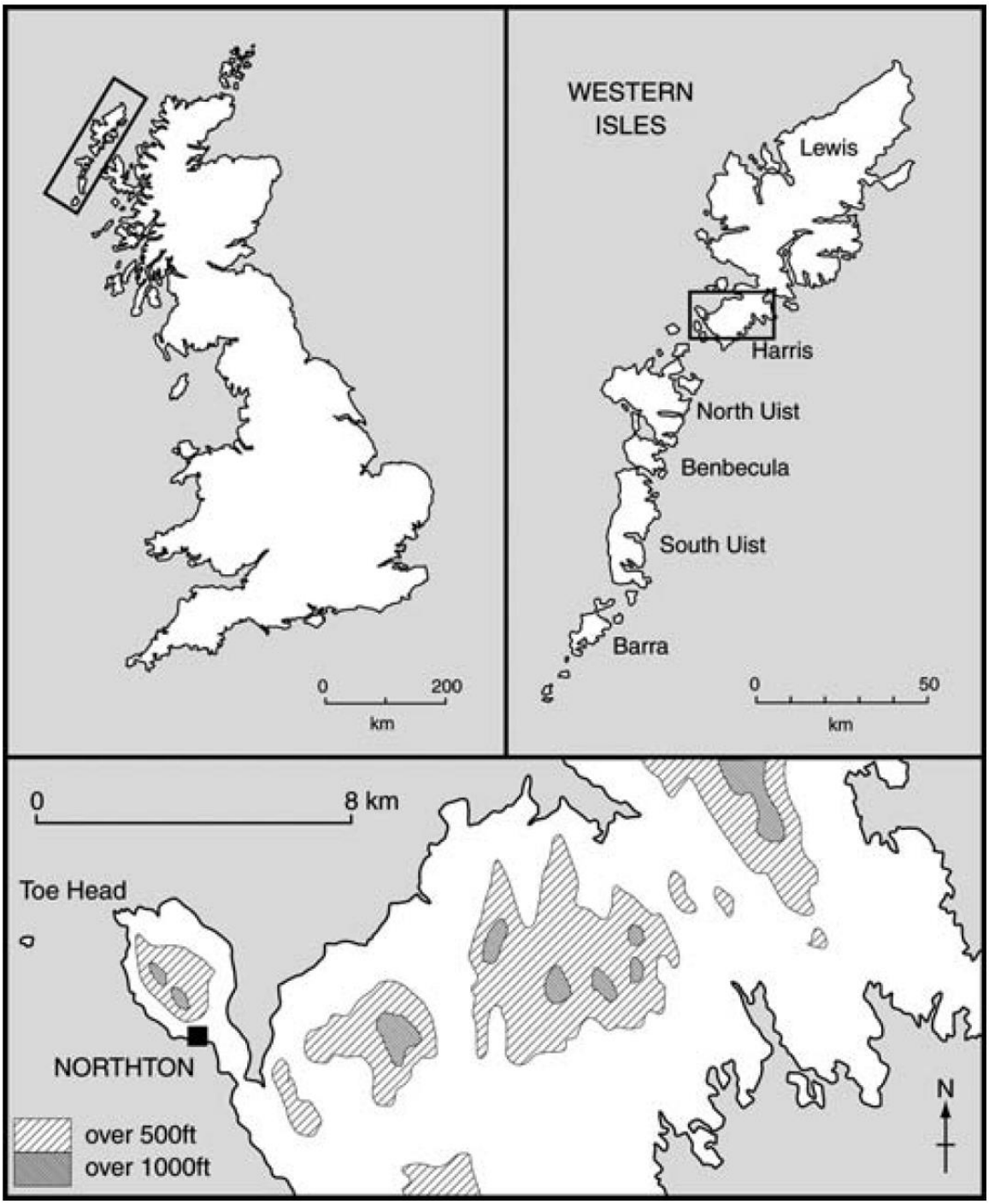

Figure 2: North-West Transect, looking East.

Figure 3: North-East Transect, looking South-West.

Figure 4: Pollen sampling site prior to sampling.

Figure 5: Column sample at pollen sampling site.

Figure 6: Revised Harris matrix for Northton 2010.

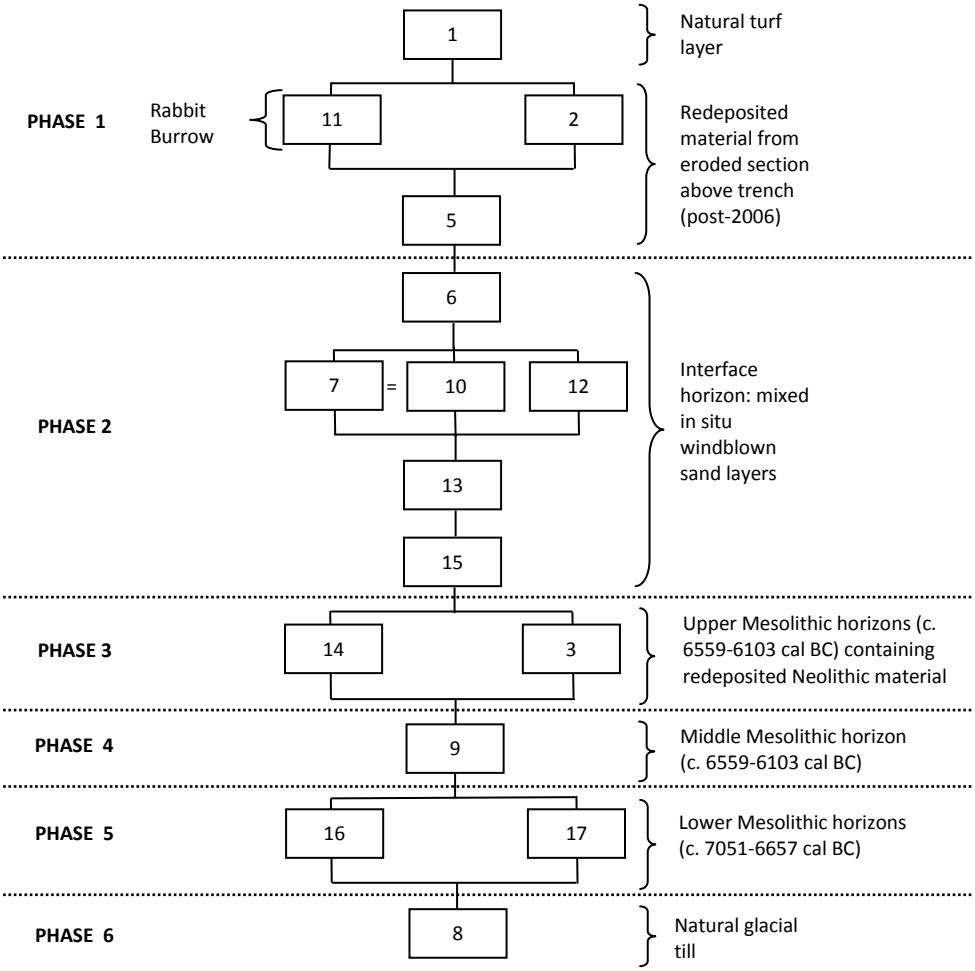

Figure 7: Borehole transect to the North of Trench 1 (Murphy et al 2001a). The two major Mesolithic horizons identified in trench 1 are visible in the base of boreholes B, F, H and J.

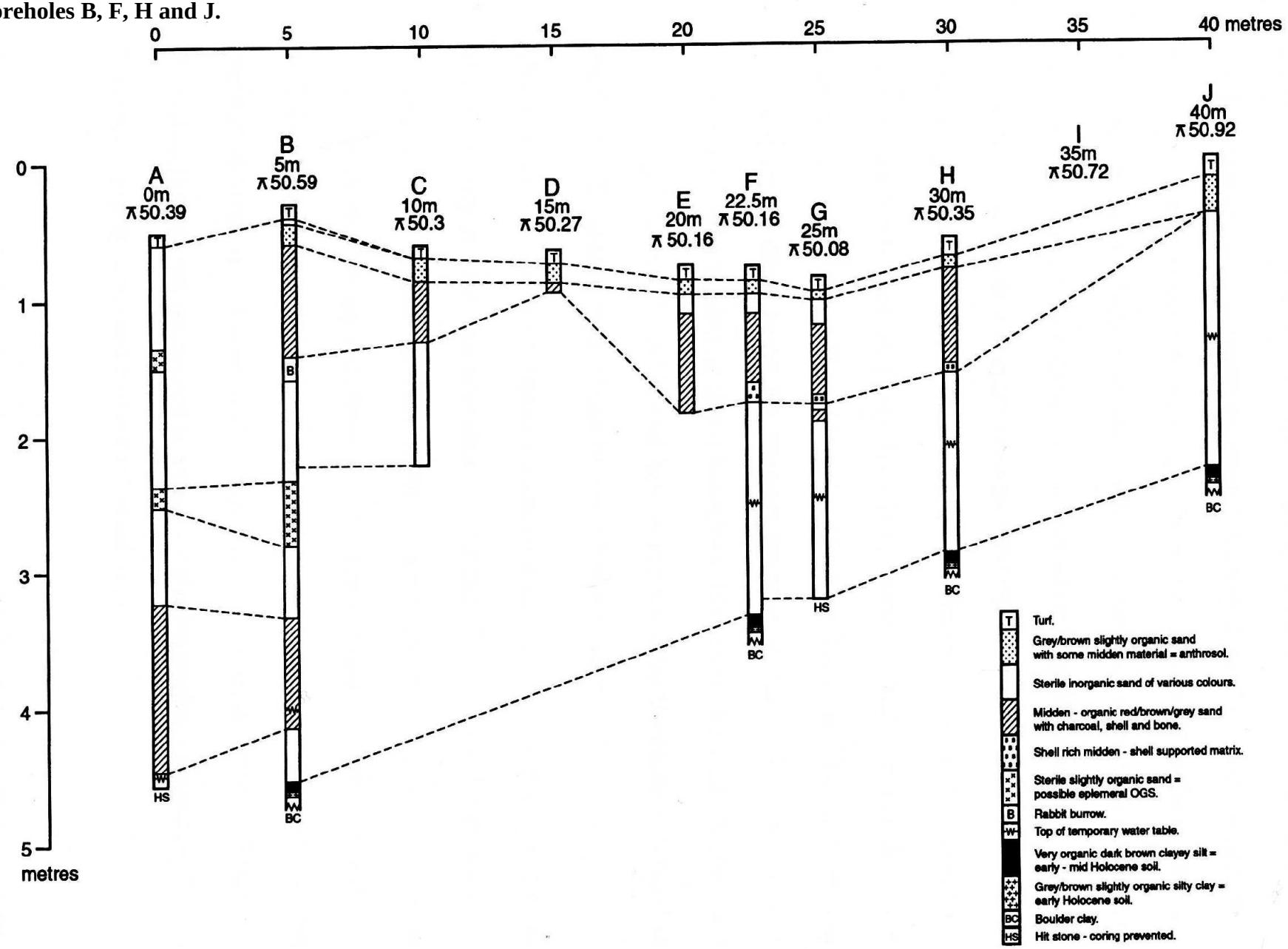

Figure 8: EDM survey of the coastal edge showing interval sample and borehole survey locations.

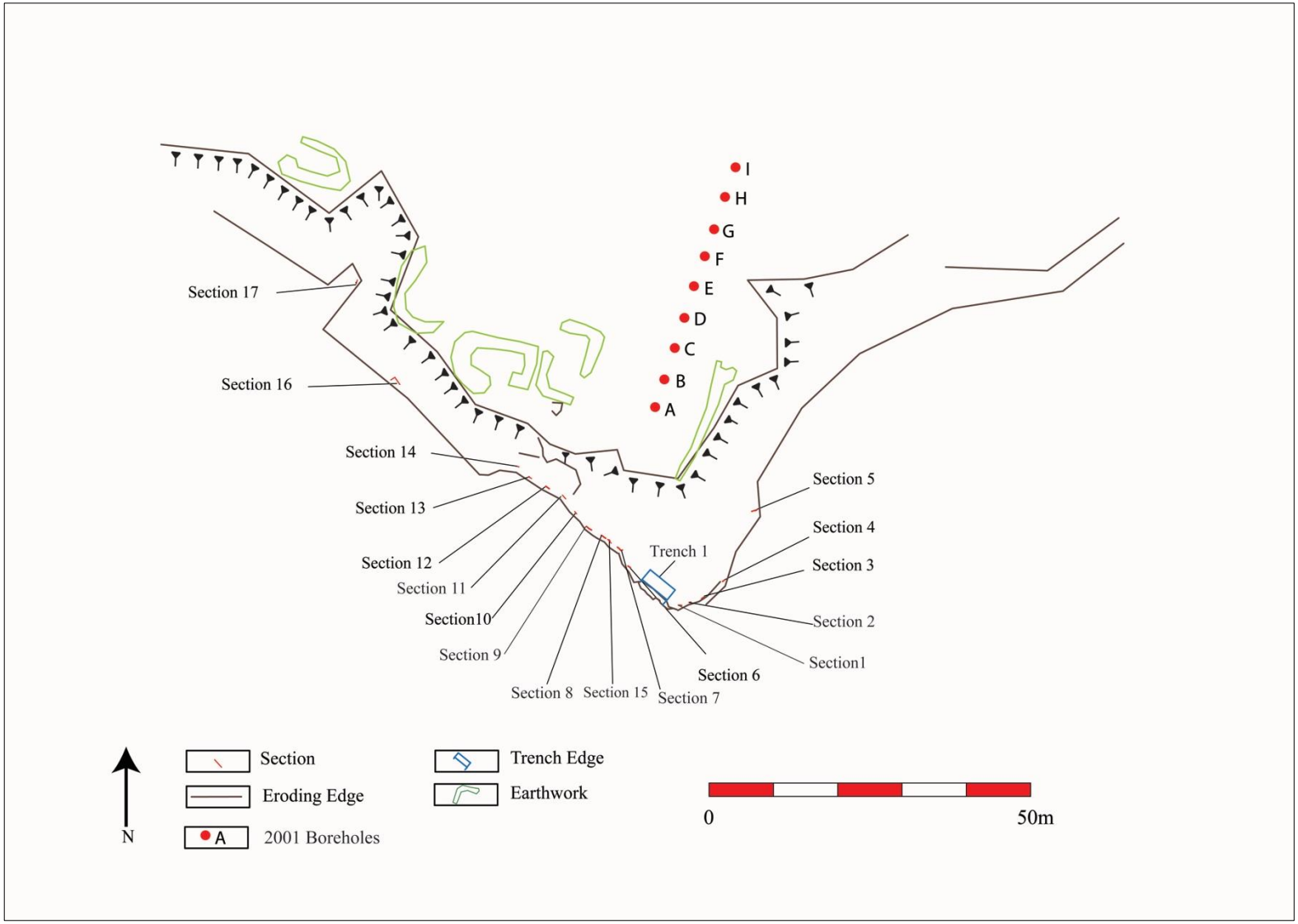

Figure 9: Section drawings through the Mesolithic land surface along the North-East transect around the headland. For section locations see figure 8.

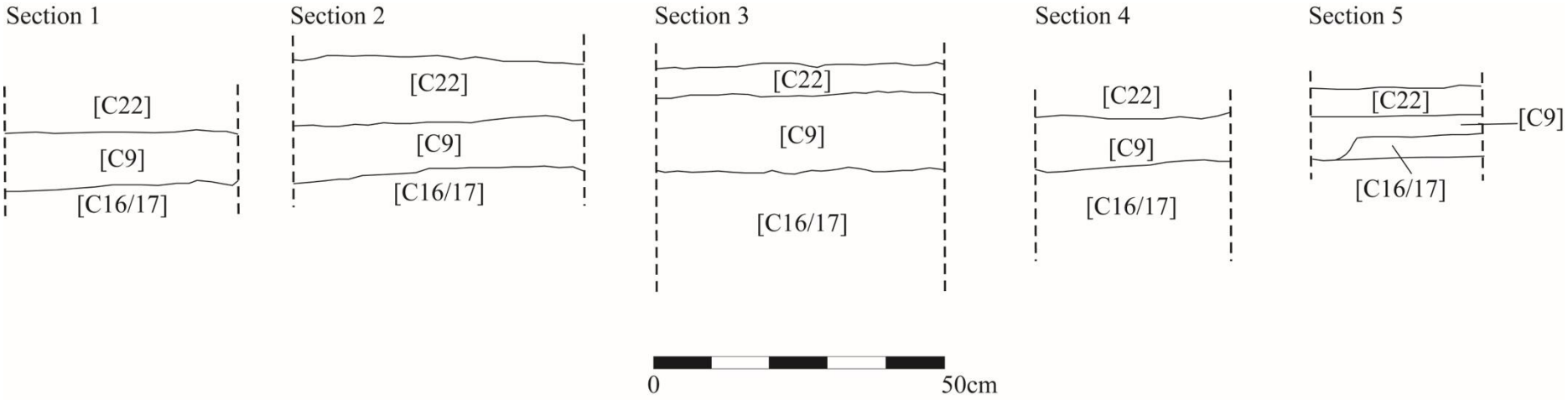

Figure 10: Section drawings through the Mesolithic land surface along the North-West transect around the headland. For section locations see figure 8.

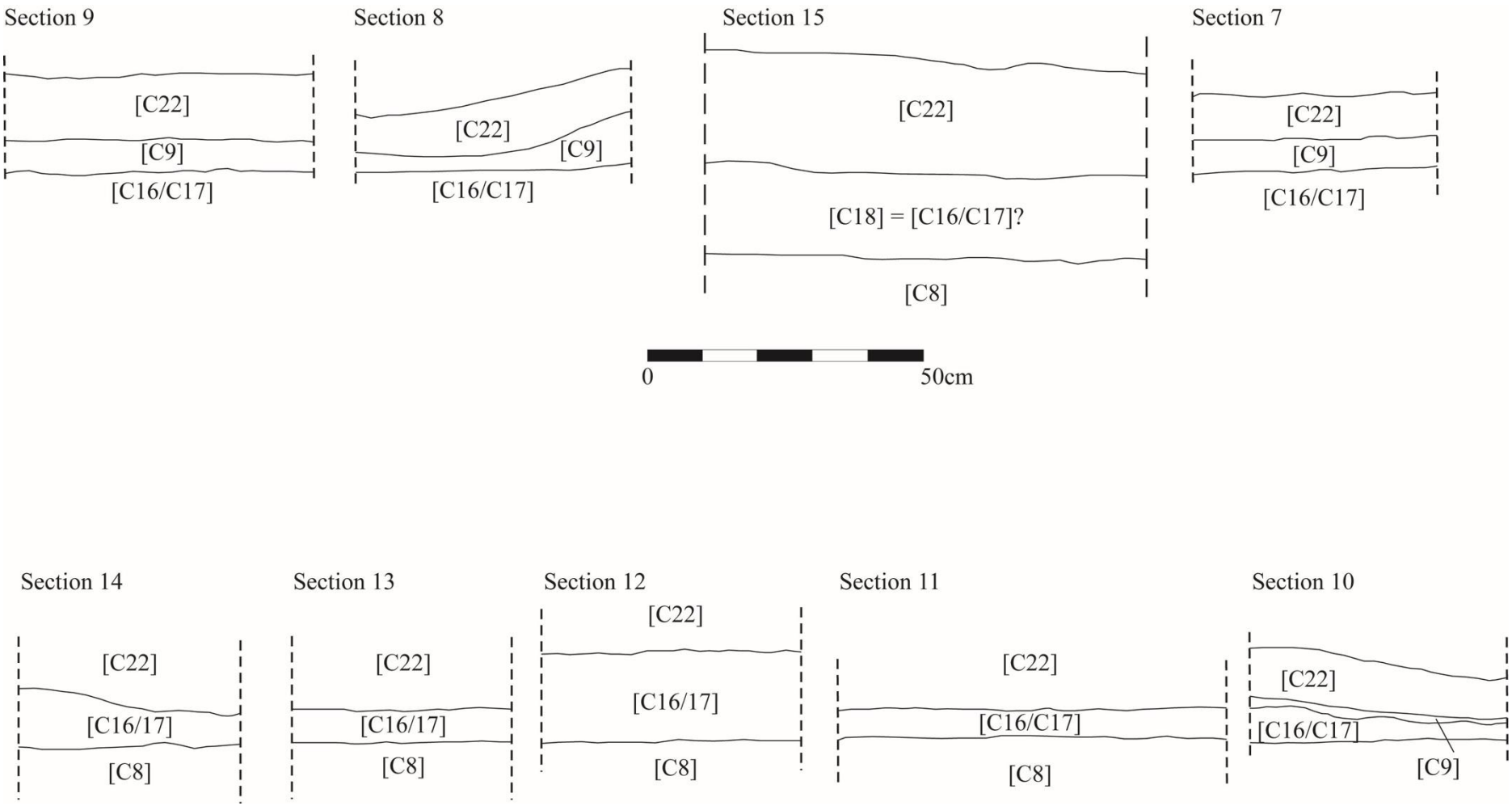

Figure 11: Section drawing through possible Mesolithic horizons in section 16.

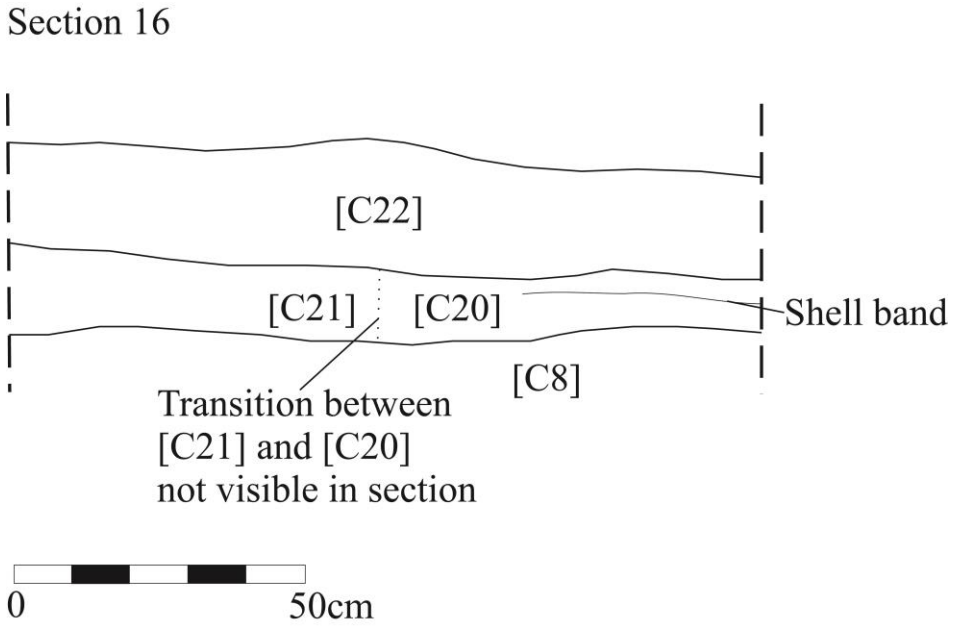

Figure 12: Section drawing through possible Mesolithic horizon in section 17.

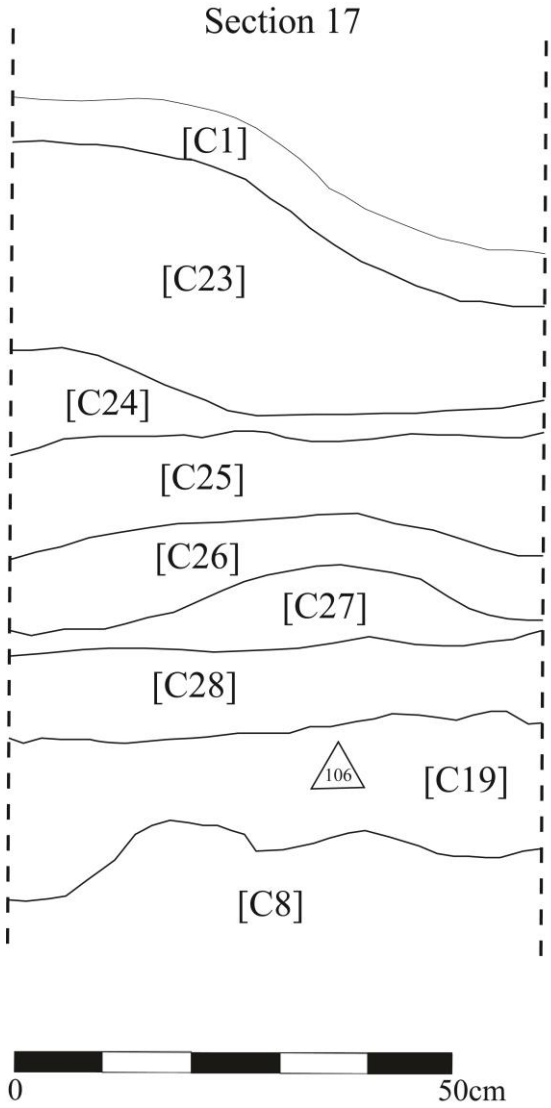

Figure 13: Section drawing of pollen sampling location.

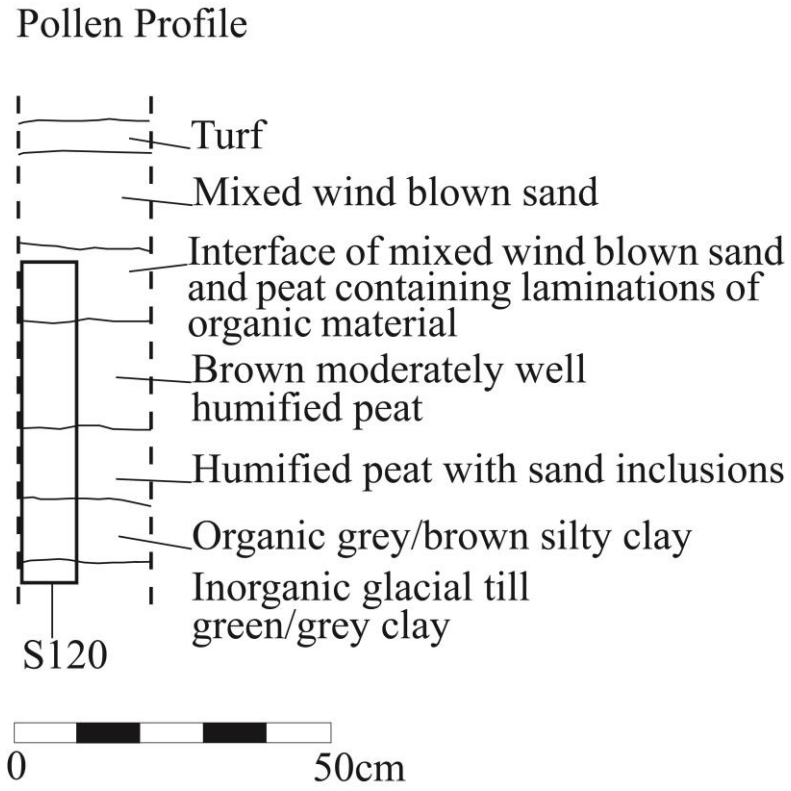

Figure 14: Section drawing of land snail sampling location.

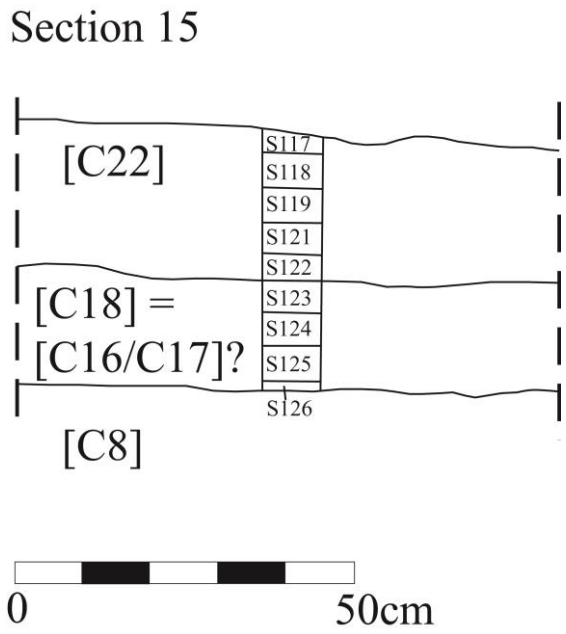

Figure 15: Harris Matrix for Northton 2011 Sections 1-5 and 7-10.

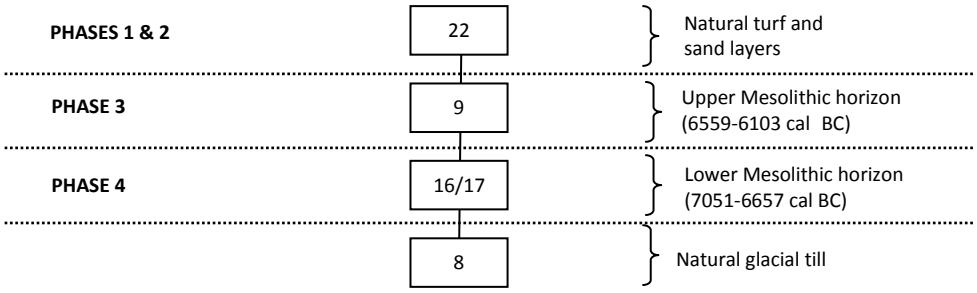

Figure 16: Harris Matrix for Northton 2011 Section 15.

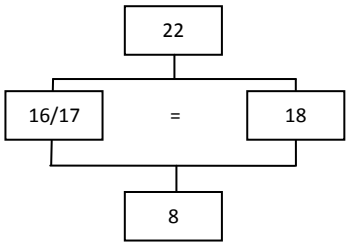

Figure 17: Harris Matrix for Northton 2011 Section 16.

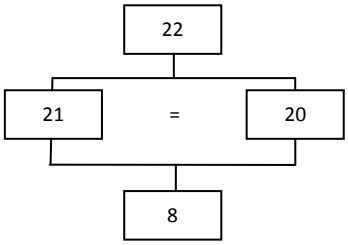

Figure 18: Harris Matrix for Northton 2011 Section 17.

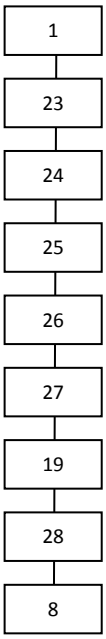

Figure 19: Photo of section 16 prior to sampling, showing the shell band in the far right of the section.

Figure 20: Photo of detail of the shell-band in section 16.

Figure 21: Photo of section 17 after cleaning, showing the shell-rich horizon at the section base.

Figure 22: Photo of shell-rich horizon at the base of section 17.

TABLES

Table 1: Radiocarbon dates from excavations at Northton in 2001 (Gregory et al 2005) and 2010 (P. Ascough, unpublished data).

Sample Number	Sample details	Sample material	RC Age BP	ð13C relative to VPDB	Calibrated Date (95.4% probability)
AA-50332	NT'01 C.5 (=C.9 in 2010 contexts)	Hazel nutshell	7525 ± 80	-24.4	6559-6226 cal BC
AA-50333	NT'01 C.5 (=C.9 in 2010 contexts)	Hazel nutshell	7395 ± 45	-23.7	6396-6103 cal BC
AA-50334	NT'01 C.5 (=C.9 in 2010 contexts)	Hazel nutshell	7420 ± 45	-24.1	6406-6220 cal BC
AA-50335	NT'01 C.7 (=C.16/17 in 2010 contexts)	Hazel nutshell	7980 ± 50	-24	7051-6699 cal BC
AA-50336	NT'01 C.7 (=C.16/17 in 2010 contexts)	Hazel nutshell	7925 ± 55	-26.3	7033-6657 cal BC
SUERC-33736	NT'10 C.14	Hazel nutshell	7470 ± 30	-23.5	6421-6249 cal BC
SUERC-33737	NT'10 C.14	Hazel nutshell	7440 ± 30	-23.3	6391-6240 cal BC
SUERC-34911	NT'10 C.14	Hazel nutshell	7460 ± 40	-25	6416-6241 cal BC

SUERC-34912	NT'10 C.14	Hazel nutshell	7400 ± 40	-21.9	6395-6117 cal BC
SUERC-34913	NT'10 C.14	Limpet shell	5070 ± 35	1.5	n/a - used to establish Marine Reservoir Effect
SUERC-34914	NT'10 C.14	Limpet shell	5080 ± 35	0.5	n/a - used to establish Marine Reservoir Effect
SUERC-34915	NT'10 C.14	Limpet shell	5105 ± 35	1.4	n/a - used to establish Marine Reservoir Effect
SUERC-34916	NT'10 C.14	Limpet shell	5085 ± 35	1.2	n/a - used to establish Marine Reservoir Effect

Table 2: List of contexts from Northton 2010 and 2011.

Context Number	Description
1	Turf layer.
2	Pale cream redeposited windblown sand layer containing occasional medium-large angular boulders (15-70cm) and rare (<1%) shells and bone, immediately below turf in trench 1.
3	Mid dark-brown smooth sandy silt containing very rare shell fragments, rare eroded pink granite (0.5-4cm) and charcoal flecks, frequent small stones (c.0.5-2cm) and occasional large stones (2-8cm) in North of trench 1. Similar to context 14, but with less frequent shell inclusions (Upper Mesolithic horizon).
4	Cleaning layer of eroded midden edge in South of trench 1.
5	Lower 2cm of context 2 (pale cream redeposited windblown sand layer).
6	Mixed layer of in situ mid-brown loose sandy soil and grey sand with no small finds in trench 1.
7	Pale cream in situ windblown sand layer containing occasional small stones (c. <0.5-2cm), rare shell, bone and teeth, underlying context 6 in trench 1.
8	Natural glacial till.
9	Black organic sandy clayey silt containing anthropogenic material - frequent charcoal flecks, worked and unworked lithics, fire-cracked rocks (c.5-25cm), occasional eroded rock patches and rare bone fragments (upper Mesolithic horizon).
10	Pale cream in situ windblown sand layer containing occasional small stones (<0.5-2cm) and rare shell and bone, underlying context 6 in trench 1. Perhaps same as context 7.
11	Rabbit burrow in North-East corner of trench 1.
12	Mixed lens of pale cream and light brown in situ sandy soil containing occasional shell in trench 1.
13	Grey in situ sandy layer containing occasional shell in North-East corner of trench 1.
14	Mid dark-brown smooth sandy silt in North of trench, probably the same as context 3, but with more frequent shell and charcoal (Upper Mesolithic horizon).
15	Mixed layer of mid-brown silty sand with pale cream sand patches containing frequent shell and very rare stones (5-10cm) in trench 1, underlying context 13.
16	Grey-light brown sandy-clayey silt containing occasional charcoal flecks, degraded clasts and small stones (<1cm), gradually grading into a silty-clay towards the bottom 1-2cm of the deposit (lower Mesolithic horizon).
17	Dark brown loose sandy silt containing frequent small gravel fragments (0.5-1cm), occasional charcoal patches, angular rocks (2-15cm), rare rounded beach pebbles (5-10 cm) and degraded rock patches (lower Mesolithic horizon).
18	Very dark brown sandy silt containing rare (<1%) small angular/sub-angular stones (1-2cm and 5-10cm) in section 15. Probably the same as contexts 16/17.
19	Dark-brown/black sandy organic silt containing shell (c.10%) and frequent (c.20%) small sub-rounded/sub angular stones (up to 0.2cm) and preserved wood in section 17.
20	Dark brown loose sandy silt containing frequent shells (c.25%) and rare (<1%) sub-angular stones (2-

	10cm) in section 16.
21	Dark brown loose sandy silt containing frequent shells (c.25%) and rare (<1%) sub-angular stones (2-10cm) in section 16.
22	Natural turf and sand layers in sections 1-16.
23	Brown mixed organic wind blown sand in section 17.
24	White lens of inorganic wind blown sand in section 17.
25	Brown mixed organic wind blown sand in section 17.
26	Dark brown peaty layer in section 17.
27	Lenses of wind-blown sand inter-digitated with organic lenses in section 17.
28	Dark brown peaty layer in section 17.

Table 3: List of photographs from Northton 2011.

Shot Number	**Description**	**Facing**	**Date**
500-02	Eroding context 9 to East of trench 1.	N	12/09/2011
503-505	Trench 1 reinstatement.	N	12/09/2011
506-508	Trench 1 reinstatement.	E	12/09/2011
509-511	Eroding context 9 to East of trench 1.	E	12/09/2011
512-514	Pre-excavation shots of section 1.	NW	12/09/2011
515-517	Section 1 after cleaning.	NW	12/09/2011
518-523	Section 1, after removal of sample 100 and cleaning.	NW	12/09/2011
524-526	Pre-excavation shots of section 2.	NW	12/09/2011
527-529	Section 2 after cleaning.	NW	12/09/2011
530-532	Section 2, after removal of sample 101 and cleaning.	NW	12/09/2011
533-545	General shots of site location.	n/a	13/09/2011
546-548	Pre-excavation shots of section 4.	NW	13/09/2011
549-551	Pre-excavation shots of section 3.	NW	13/09/2011
552-554	Section 4 after cleaning.	NW	13/09/2011
555-558	Section 3 after cleaning.	NW	13/09/2011
559-564	Section 4, after removal of sample 103 and cleaning.	NW	13/09/2011
565-567	Section 3, after removal of sample 102 and cleaning.	NW	13/09/2011
568-570	Pre-excavation shots of section 5.	NW	13/09/2011

571-573	Section 5 after cleaning.	NW	13/09/2011
574-576	Pre-excavation shots of section 6.	NW	13/09/2011
577-579	Section 5, after removal of sample 104 and cleaning.	NW	13/09/2011
580-582	Section 6 after cleaning (context 9 not present in section).	NE	13/09/2011
583-586	Pre-excavation shots of section 7.	NE	13/09/2011
587-590	Pre-excavation shots of section 8.	NE	13/09/2011
591-593	Pre-excavation shots of section 9.	NE	13/09/2011
594-596	Section 7 after cleaning.	NE	13/09/2011
597-598	Section 7 being sampled.	NE	13/09/2011
599-601	Section 8 after cleaning.	NE	13/09/2011
602-604	Section 8, after removal of sample 107 and cleaning.	NE	13/09/2011
605-607	Pre-excavation shots of section 10.	NE	13/09/2011
608-610	Pre-excavation shots of section 11.	NE	13/09/2011
611-613	Section 9 after cleaning.	NE	13/09/2011
614-616	Pre-excavation shots of section 12.	NE	13/09/2011
617-619	Section 9, after removal of sample 108 and cleaning.	NE	13/09/2011
620-622	Section 10 after cleaning.	NE	13/09/2011
623-626	Section 10 after cleaning.	NE	13/09/2011
627-629	Section 11 after cleaning.	NE	13/09/2011
630-632	Section 10, after removal of sample 114 and cleaning.	NE	13/09/2011
633-635	Section 11, after removal of sample 110 and cleaning.	NE	13/09/2011
636-638	General shots of site context.	n/a	13/09/2011
639-641	Section 12 after cleaning.	NE	13/09/2011
642-644	Section 13 after cleaning.	N	13/09/2011
645-647	Section 12, after removal of sample 111 and cleaning.	NE	13/09/2011
648-650	Section 14 after cleaning.	N	13/09/2011
651-653	Section 13, after removal of sample 112 and cleaning.	NE	13/09/2011
654-656	Section 14, after removal of sample 113 and cleaning.	N	13/09/2011
657-659	Pre-cleaning shots of pollen sampling site.	N	14/09/2011
660-661	Pollen sample site after cleaning.	N	14/09/2011
662-665	General shots of Temple from pollen sampling site.	N	14/09/2011

666-668	In situ pollen sample after cleaning.	N	14/09/2011
669-672	Pre-excavation shots of section 15.	N	14/09/2011
673-681	Pre-excavation shots of section 16.	N	14/09/2011
682-687	Pre-excavation shots of section 17.	E	14/09/2011
688-690	Section 15 after cleaning.	N	14/09/2011
691-693	Pre-excavation shots of section 17, context 19.	E	14/09/2011
694	General shot of South Harris hills over Northton machair.	N	15/09/2011
695-698	Post-excavation shots of section 17.	E	15/09/2011
699-701	Section 16 after cleaning.	N	15/09/2011
702-705	Section 16, after removal of sample 127 and 128 and cleaning.	N	15/09/2011

Table 4: List of drawings from Northton 2011.

Drawing Number	Sheet	Type	Scale	Area	Description
14	1	Plan	1:300	n/a	Plan of sections 1-17 locations around coastal edge.
15	2	Section	1:10	Sections 1-14	Sketches of sections 1-14 through contexts 8, 9, 16/17 and 22.
16	3 (on back of context sheet for NT11 context 9)	Sketch plan	Sketch (not to scale)	n/a	Sketch of stray find locations found eroding out of context 9 below trench 1.
17	4	Section	1:10	n/a	Pollen sample profile.
18	4	Section	1:10	Section 15	South-facing section through context 18.
19	5	Section	1:10	Section 17	West-facing section through contexts 1, 8, 19, and 23-28.
20	4	Section	1:10	Section 16	South-West facing section through contexts 8, 20, 21 and 22.

Table 5: List of finds from Northton 2011.

Small Find Number	Context	Material	Description
102	Unstratified	Lithic	Lithic flake found on beach.
103	9?	Lithic	Quartz flake found eroding from context 9? beside trench 1.
104	9?	Lithic	Quartz flake found eroding from context 9? beside trench 1.
105	9?	Lithic	Quartz flake found eroding from context 9? beside trench 1.
106	19	Wood	Worked wood from peat in section 17.
107	18	Lithic	Lithic flake from section 15.

Table 6: List of samples from Northton 2011.

Sample	Context	Section	Description	Number of Tubs/Bags
100	9	1	Bulk sample for GBA.	1 tub (c. 2.5l)
101	9	2	Bulk sample for GBA.	1 tub (c. 2.5l)
102	9	3	Bulk sample for GBA.	1 tub (c. 2.5l)
103	9	4	Bulk sample for GBA.	1 tub (c. 2.5l)
104	9	5	Bulk sample for GBA.	1 tub (c. 2.5l)
105	n/a	n/a	n/a	n/a
106	9	7	Bulk sample for GBA.	1 tub (c. 2.5l)
107	9	8	Bulk sample for GBA.	1 tub (c. 2.5l)
108	9	9	Bulk sample for GBA.	1 tub (c. 2.5l)
109	9	10	Bulk sample for GBA.	1 tub (c. 1l)
110	9	11	Bulk sample for GBA.	1 tub (c. 2.5l)
111	16/17	12	Bulk sample for GBA.	1 tub (c. 2.5l)
112	16/17	13	Bulk sample for GBA.	1 tub (c. 1l)

113	16/17	14	Bulk sample for GBA.	1 tub (c. 2.5l)
114	16/17	10	Bulk sample for GBA.	1 tub (c. 2.5l)
115	18	15	Bulk sample for GBA.	4 tubs (c. 27l)
116	19	17	Bulk sample for GBA.	2 tubs (c. 12l)
117	22	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
118	22	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
119	22	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
120	n/a	n/a	0.5 m. column sample for pollen analysis.	1 column sample tin
121	22	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
122	22	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
123	18	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
124	18	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
125	18	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
126	18	15	Column sample for land snail analysis.	1 bag (c. 0.5-1l)
127	20	16	Bulk sample for GBA.	1 tub (c. 7l)
128	21	16	Bulk sample for GBA.	2 tubs (c. 15l)